AMENDMENTS TO THE DRAWINGS

The Applicant has formalized the originally filed informal drawings. No new matter has been added.

REMARKS

Claims 1-30 and 35-39 are currently pending. Claims 10, 27, and 31-34 are herein cancelled (for a total of 6 cancelled claims, including two independent). Claims 1, 11, 12, 18, 28, and 35-38 are herein being amended. Claims 40-44 are new (for a total of 6 new claims, including one independent).

The Applicant notes with appreciation the Examiner's indication of allowable subject matter (claims 10, 11, 27, 28), as well as the Examiner's acknowledgment of the Applicant's four information disclosure statements filed in August 2003, October 2004, November 2004, and December 2004, respectively.

The Examiner issued a restriction requirement. During a telephone conversation on January 19, 2005 between the Examiner and the Applicant's attorney, the Applicant provisionally elected group I (claims 1-30 and 35-39). The Applicant herein affirms this election, and withdraws and cancels the non-elected claims 31-34 without prejudice.

The Examiner objected to the drawings for being informal. The Applicant is herein submitting for the Examiner's review and approval formal drawings to replace the originally filed informal drawings. The Applicant respectfully requests reconsideration and withdrawal of this objection.

Claims 1-9, 12-26, 29, 30, and 35-39 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Sato (U.S. Patent 6,209,046) in view of Irwin (U.S. Patent Application 2002/0199040).

The Examiner indicated that claims 10, 11, 27, and 28 would be allowable if rewritten in independent form. The Applicant has amended independent claims 1 and 18 to include limitations of their respective dependent claims 10 and 27. Also, the Applicant has amended independent claims 12 and 35-38 to include similar limitations. As such, the Applicant respectfully requests withdrawal of this rejection.

In addition, the Applicant has added claims 40-45. New independent claim 40 recites, part: "A method for selectably enabling data transfer modes between devices and storage elements in a video processing system, comprising: ... selecting an operation mode in which the channel will operate, wherein available operation modes include a multi-segment operation mode for transferring non-contiguous blocks of data ... ."

New dependent claims 41 and 42 distinctly define additional operation modes, including a fixed length single burst mode, a chaining mode, and an auto-rollback mode. Particular characteristics are recited for each operation mode. Claim 43 further defines the method when the multi-segment operation mode is enabled, where the method includes transferring a block of a video frame. Claims 44 and 45 further define parameters associated with the data transfer.

The Applicant believes that claim 40 and its dependent claims 41-45 are also patentably distinct over the cited references, in light of the Examiner's comments as well as in light of the remarks herein.

It is further noted that the Applicant intends to pursue the originally filed claims and the non-elected claims, as well as other claims of varying scope, in one or more continuation/divisional applications. The Applicant amended herein to move this case to allowance, and not to overcome the cited references. To this end, the Applicant wishes to clarify a number of points as to the cited references.

As a preliminary matter, the Applicant does not concede that Irwin has an effective date that is prior to the Applicant's invention date. The Applicant reserves the right to swear behind Irwin. In addition, the Applicant respectfully believes that the original claims are patentably distinct over the cited references. For instance, note that Sato only changes the transfer rate after the data transfer has been initiated. This is because Sato must monitor the error rate of the transfer to determine if a decrease in transfer rate is necessary. (Abstract; col. 2, lines 19-23; figures 2-5; all claims). The Examiner suggests that this decrease in transfer rate in response to error detection implicates selection of a mode.

In contrast, the Applicant's claimed invention recites receiving a command to initiate data transfer, and determining/selecting a channel and a mode, and then enabling data transfer using

the channel/mode selected. Thus, various types of data can be effectively transferred using the proper channel and mode, as recited in the Applicant's claims.

If Sato were presented with multiple types of data, it would be detected only after errors occurred *during* the transfer, and even then, the only recourse at that point would be to reduce the transfer rate. This reduction would not accommodate those data processing systems requiring different types of data transfers amongst memory device and other system and I/O devices. In a video processing system, for example, data transfers between a memory device and motion compensation engine can require different data configuration parameters (e.g., operating mode) compared with the data configuration parameters for data transfers amongst a variable length encoding device and an I/O memory device. As understood by the Applicant, neither Sato or Irwin or their combination address this problem.

Also, and as correctly noted by the Examiner, Sato fails to disclose or suggest selection of a channel. The Examiner cites Irwin to remedy this deficiency.

Irwin discloses a system "for the high-speed direct movement of data between remote blocks of memory and between blocks of memory and storage devices. The high speed movement of data is facilitated by a high-speed local bus, and in preferred embodiments, the data undergoes only a single DMA transfer." (Abstract; paragraph #0004). Irwin further discloses that the "local bus can also provide communication between remote memory blocks that have dedicated channels for transmission of data in each direction. ... In preferred embodiments, the system bus utilizes the fastest available data transfer channel. In one embodiment, the system bus comprises a PCI bus. In another embodiment, the system bus comprises a PCIX, NGIO, Infiniband, or similar system I/O bus or architecture." (paragraph #s 0008 and 0009). Thus, Irwin's disclosed channels are simply dedicated fast channels that are used to speed up the data transfer over the bus ("To improve speed the local bus 5 provides dedicated channels for transmission of data in each direction" – paragraph 0039). The Applicant can find no occurrence where Irwin discusses selection of a channel for carrying out a data transfer, *wherein the selection is responsive to a received command to initiate the data transfer*, as recited in the Applicant's claims.

Favorable action is solicited. The Examiner is invited to directly contact the undersigned in order to advance the prosecution of this application.

Respectfully submitted,
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By: _____

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